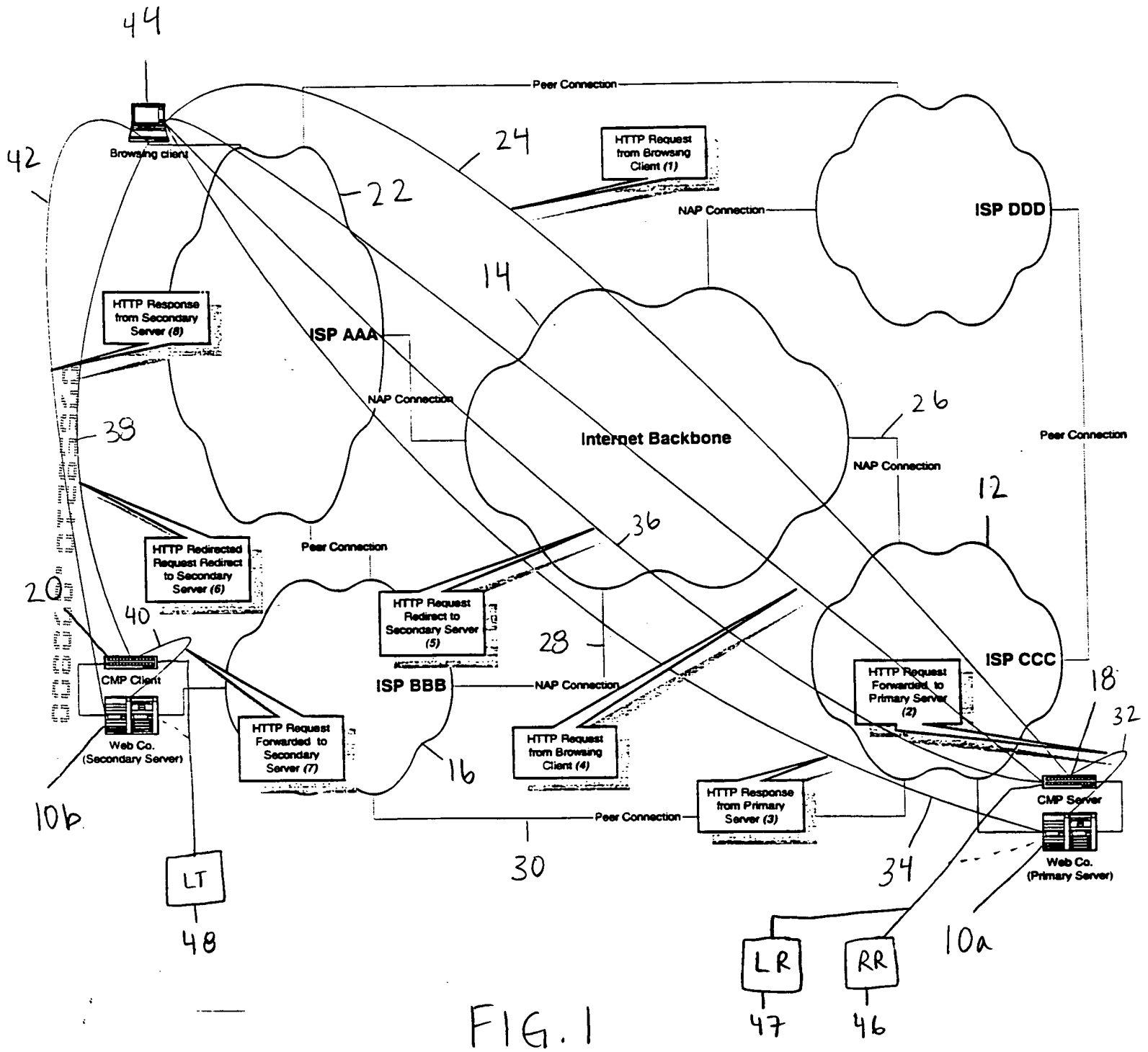
44
Peer Connection
Browsing client
42
24
HTTP Request from Browsing Client (1)
22
NAP Connection
ISP DDD
14
HTTP Response from Secondary Server (8)
ISP AAA
NAP Connection
Internet Backbone
26
Peer Connection
39
NAP Connection
12
36
HTTP Redirected Request Redirect to Secondary Server (6)
Peer Connection
20
40
HTTP Request Redirect to Secondary Server (5)
28
ISP CCC
CMP Client
ISP BBB
NAP Connection
HTTP Request Forwarded to Primary Server (2)
18
32
Web Co. (Secondary Server)
HTTP Request Forwarded to Secondary Server (7)
16
HTTP Request from Browsing Client (4)
HTTP Response from Primary Server (3)
CMP Server
10b
Peer Connection
30
34
Web Co. (Primary Server)
LT
48
LR
RR
10a
47
46

FIG. 1

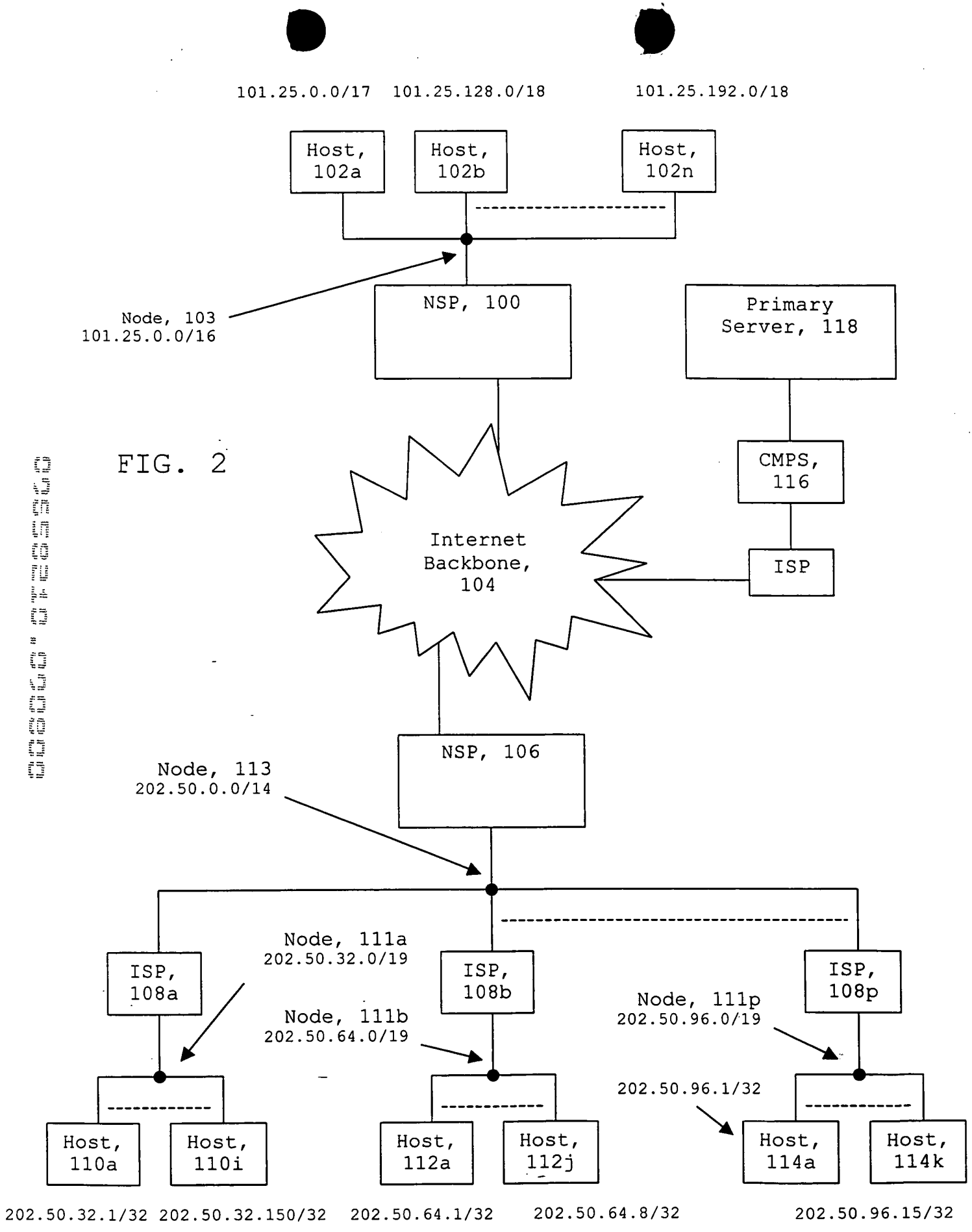
101.25.0.0/17
101.25.128.0/18
101.25.192.0/18
Host, 102a
Host, 102b
Host, 102n
Node, 103
101.25.0.0/16
NSP, 100
Primary Server, 118
CMPS, 116
Internet Backbone, 104
ISP
NSP, 106
Node, 113
202.50.0.0/14
Node, 111a
202.50.32.0/19
Node, 111b
202.50.64.0/19
Node, 111p
202.50.96.0/19
ISP, 108a
ISP, 108b
ISP, 108p
202.50.96.1/32
Host, 110a
Host, 110i
Host, 112a
Host, 112j
Host, 114a
Host, 114k
202.50.32.1/32
202.50.32.150/32
202.50.64.1/32
202.50.64.8/32
202.50.96.15/32

FIG. 2

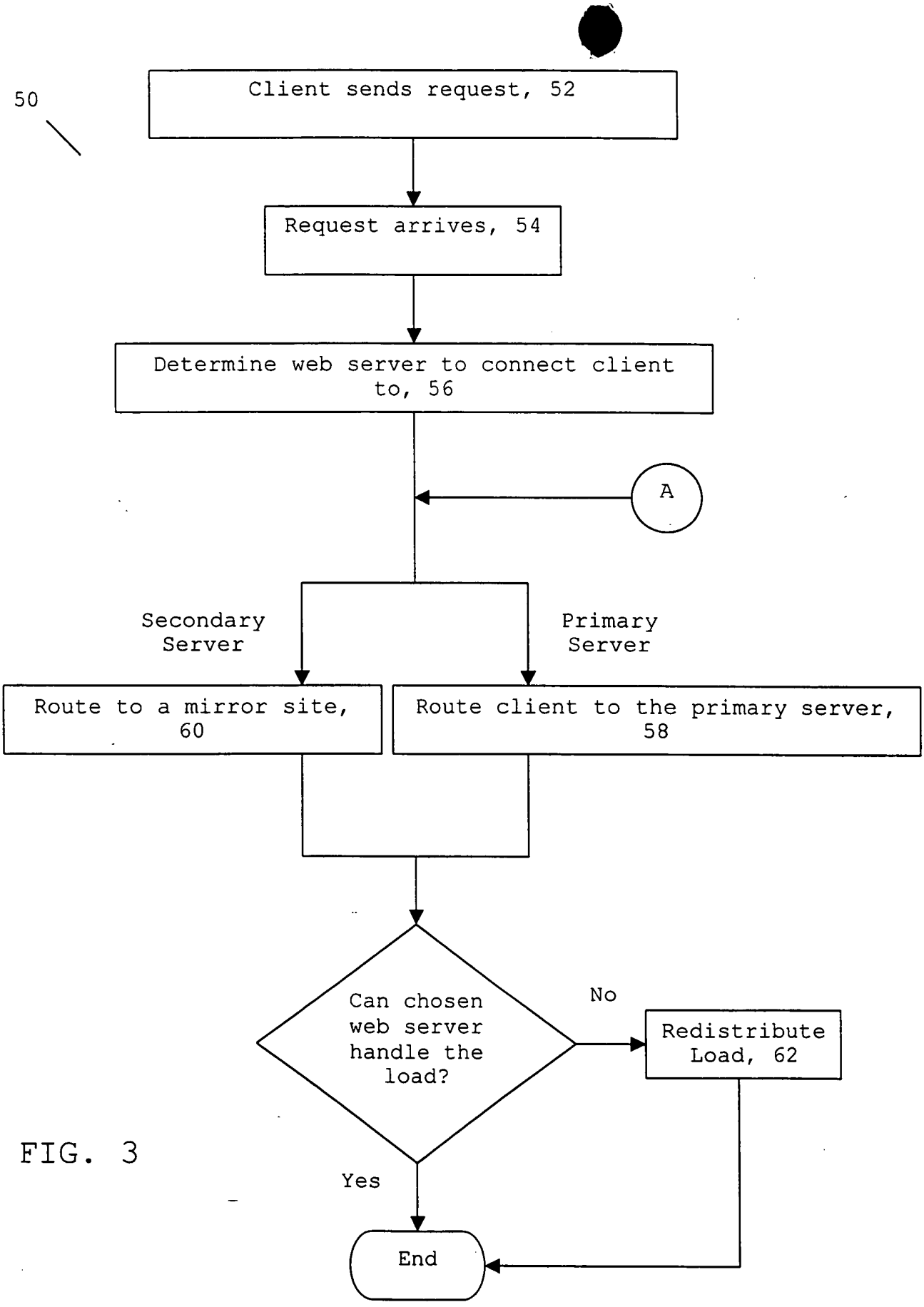
50
Client sends request, 52
Request arrives, 54
Determine web server to connect client to, 56
A
Secondary Server
Primary Server
Route to a mirror site, 60
Route client to the primary server, 58
Can chosen web server handle the load?
No
Redistribute Load, 62
Yes
End

FIG. 3

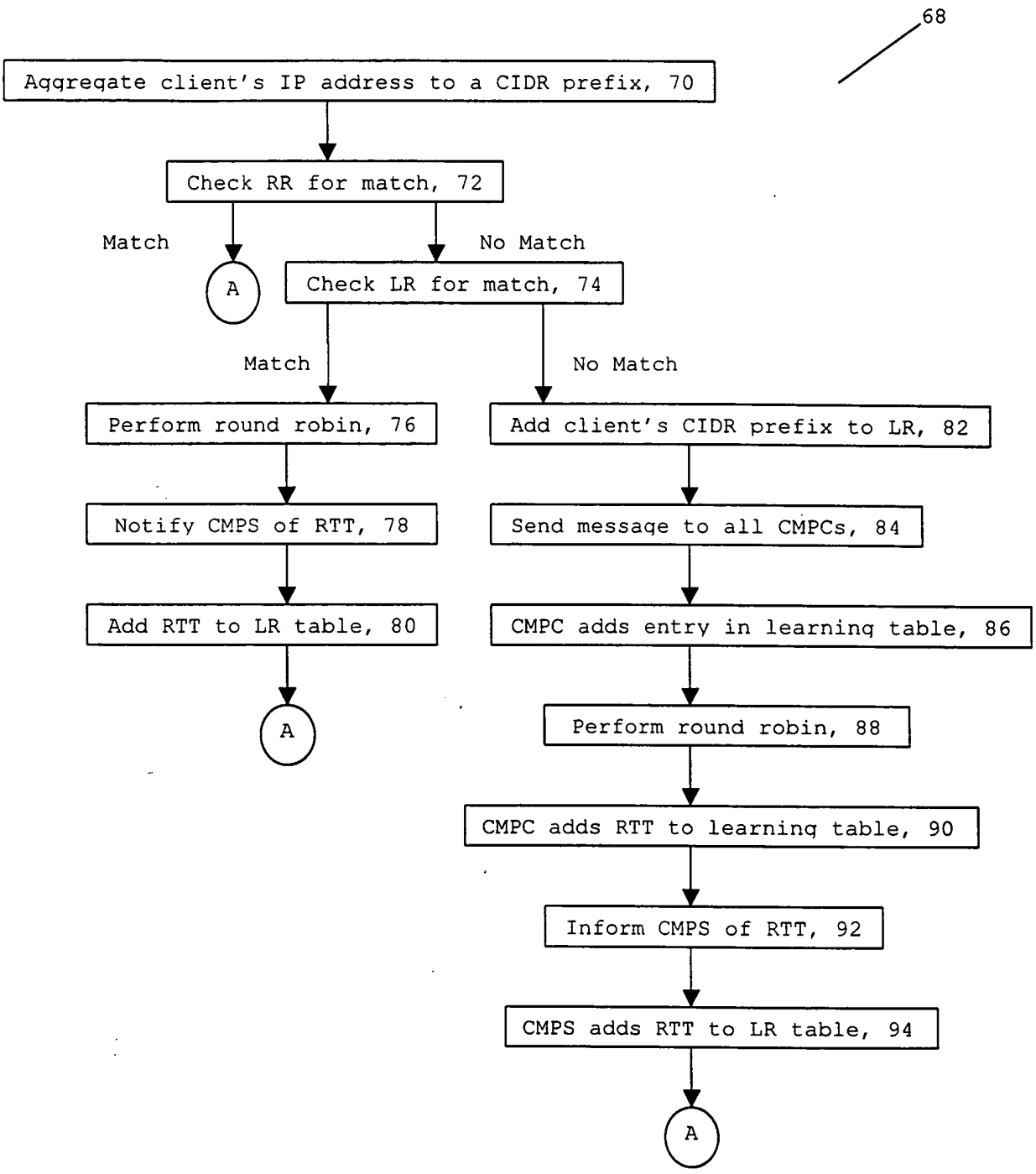
68
Aggregate client's IP address to a CIDR prefix, 70
Check RR for match, 72
Match
No Match
A
Check LR for match, 74
Match
No Match
Perform round robin, 76
Notify CMPS of RTT, 78
Add RTT to LR table, 80
A
Add client's CIDR prefix to LR, 82
Send message to all CMPCs, 84
CMPC adds entry in learning table, 86
Perform round robin, 88
CMPC adds RTT to learning table, 90
Inform CMPS of RTT, 92
CMPS adds RTT to LR table, 94
A

FIG. 4

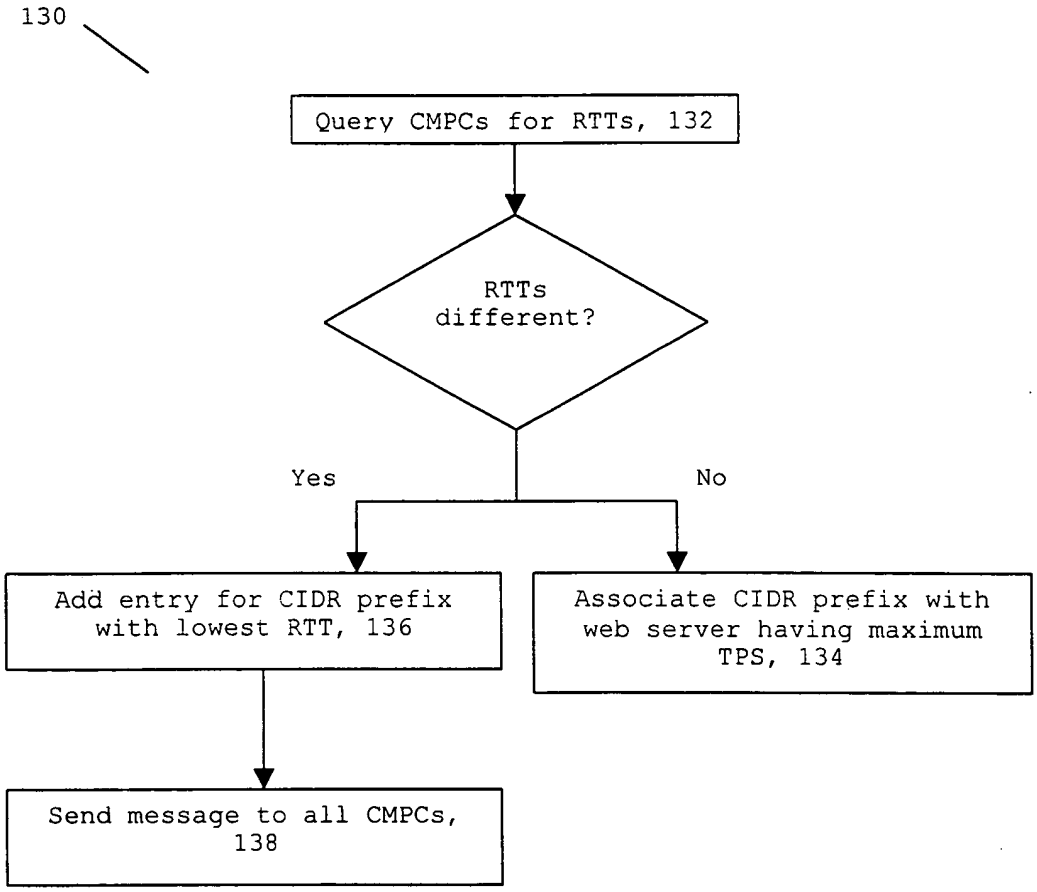
130
Query CMPCs for RTTs, 132
RTTs different?
Yes
No
Add entry for CIDR prefix with lowest RTT, 136
Associate CIDR prefix with web server having maximum TPS, 134
Send message to all CMPCs, 138

FIG. 5